International Polar Year/Decade – A Danish Contribution

In response to the proposal of establishing an International Polar Year or Decade a group of Danish scientists met to explore the interests in participating in the project. It was found that with the broad field of on-going research activity in Greenland and surrounding waters there is a good background for participating in fields such as glaciology, climate variability, geophysics and sea ice research. A preliminary list of research topics worked out includes the following subjects: climate variability (NAO/AO), the mass balance of the Greenland inlandice with studies of outlet glaciers and Hans Tausen Iskappe in northern Greenland, geophysical investigations including gravity measurements, sea ice studies including ice-drift camps and meteorology in the Artic Ocean and Fram Strait, the influence of climate variations on terrestrial ecosystems, permafrost studies and Deep Ocean Drilling in the Arctic Ocean, the latter within the established international framework.

In view of the different time scales of these research subjects the idea of a Polar Year was supported as well as a Polar Decade. In glaciology a shorter period of one to two year will be adequate whereas the other activities require a longer term to be meaningful with ground and aircraft measurements that may be carried out in campaigns at intervals of a year, for instance, distributed over a 10-year period, for example. Continuous monitoring from satellites is essential in this context to link the measurements spaced in time. The proposed Danish activity calls for international co-operation to enlarge the scope of the work.

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Lyngby, 13 March 2003